



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,945	11/14/2003	Yoshihiro Fukano	CS-31-031114	7414

22712 7590 01/04/2005

PAUL A. GUSS
PAUL A. GUSS ATTORNEY AT LAW
775 S 23RD ST FIRST FLOOR SUITE 2
ARLINGTON, VA 22202

EXAMINER

DUNWOODY, AARON M

ART UNIT	PAPER NUMBER
----------	--------------

3679

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/706,945

Applicant(s)

FUKANO ET AL.

Examiner

Aaron M Dunwoody

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5 and 7-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5 and 7-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 5072072, Bawa et al in view of US patent 5154453, Nishio, and US patent 3633944, Hamburg.

In regards to claim 1, Bawa et al disclose a tube joint comprising:

a joint body (12) which has a through-hole as a fluid passage formed in an axial direction and which has a first screw section (44) formed at least at one end;

a nut member (4) which connects a tube member (16) to the joint body, the nut member being fitted to the one end of the joint body by a second screw section (54) that is screwed with the first screw section;

a fastening mechanism (46) which is provided at the one end of the joint body and which is pressed radially inwardly by an inner wall surface of the nut member for engaging with a outer circumferential surface of the tube member; and

a regulating element (see Figure 4a below) which is provided on an end face of the nut member to be screwed on the joint body and which regulates a screwing amount of the nut member on the joint body.

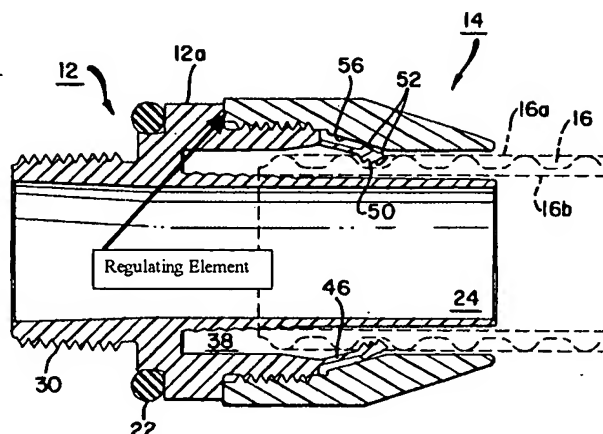


FIG. 4(a)

Bawa et al does not disclose a diametrally-expanded tube member. Nishio teaches a diametrally-expanded tube member (5). As Nishio relates to a pipe joint made of resin to be suitably used for a pipe used for a fluid, it would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the tube member as a diametrally-expanded tube member, since a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Bawa et al does not disclose the regulating element having an annular projection which protrudes by a predetermined length from the end surface of the nut member toward the joint body, the screwing amount of the nut member is regulated by abutment of the annular projection against an annular step of the joint body, and the annular projection being plastically deformable. Hamburg teaches a regulating element (46, 47) having an annular projection which protrudes by a predetermined length from the end surface of the nut member toward the joint body, and the annular projection being

Art Unit: 3679

plastically deformable to prevent overtightening and possible damage to the parts (col. 3, lines 62-69). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a regulating element with an annular projection which protrudes by a predetermined length from the end surface of the nut member toward the joint body, and the annular projection being plastically deformable to prevent overtightening and possible damage to the parts, as taught by Hamburg.

In regards to claim 2, Bawa et al disclose the fastening mechanism including a plurality of collet sections (46) which are elastically deformable toward an outer circumference of the tube member inserted into the joint body and which are segmented in a circumferential direction to surround the outer circumferential surface of the tube member, and fastening pawls (50) which are formed on the collet sections and which bite into the outer circumferential surface of the tube member.

In regards to claim 3, Bawa et al a pressing section (56) being provided on the inner wall surface of the nut member, the pressing section comprising a tapered surface having gradually decreasing inner diameters from the second screw section, and the collet sections being pressed by the pressing section radially inwardly when the nut member is screwed.

In regards to claim 5, Hamburg discloses the end surface of the nut member being formed with an annular recess (in between the projections) for receiving the annular projection deformed when the nut member is further screwed toward the joint body from where the annular projection abuts against the annular step of the joint body.

In regards to claim 7, Nishio further teaches the nut member (4) being formed with a plug hole for inserting the tube member thereinto, and an edge section (44) being provided on the inner wall surface of the nut member in the vicinity of an end of the plug hole, the edge section biting into the outer circumferential surface of the tube member.

In regards to claim 8, Nishio further teaches a tapered surface being formed at the end of the joint body, the tapered surface being diametrically expanded gradually in a direction in which the tube member is inserted, and a projection is formed circumferentially on the tapered surface, corresponding to the edge section of the nut member.

In regards to claim 9, Bawa et al disclose a projection being formed circumferentially corresponding to the fastening pawls formed on the collet sections, the projection being provided on an outer circumferential surface at an end of the joint body.

In regards to claim 10, Bawa et al disclose each of the joint body and the nut member being formed of a resin material.

In regards to claim 11, Nishio further teaches a cylindrical section being formed at the end of the joint body, a diametrically expanded section of the tube member being attached to the cylindrical section, a chamfered section (8) being formed at an end of cylindrical section, the chamfered section faces a through-hole.

Response to Arguments

Applicant's arguments filed 10/28/2004 have been fully considered but they are not persuasive. The Applicant argues:

Art Unit: 3679

Elements 47 of Hamburg do not form an annular projection, but rather are constituted by a 'a number of bumps or projections 47.' The projections 47 do not, individually or collectively, make up an annular projection (i.e., shaped like or forming a ring) that protrudes a predetermined length from an end surface of the nut member toward the joint body, as presently claimed.

The Examiner disagrees. In Figure 9 and 10 of Hamburg '944, elements 46 and 47 of Hamburg do form an annular projection. The projection 46 and 47 do make up an annular projection (i.e., shaped like or forming a ring) that protrudes a predetermined length from an end surface of the nut member toward the joint body, as presently claimed.

The Applicant argues that there is no statement anywhere in the cited reference to suggest that the bumps 47 are plastically deformable. The Examiner disagrees. The material of Hamburg is inherently capable of plastic deformation.

It is elementary that the mere recitation of a newly discovered function or property, inherently possessed by things in the prior art, does not cause a claim drawn to distinguish over the prior art. Additionally, where the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on. In re Swinehart, 169 USPQ 226 (CCPA1971). Therefore, the cited reference meets the claim limitation.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

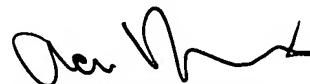
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M Dunwoody whose telephone number is 703-306-3436. The examiner can normally be reached on 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P Stodola can be reached on 703-306-5771. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3679

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Aaron M Dunwoody
Examiner
Art Unit 3679

.amd